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Dated: 2/17/04 Signature: Joanne Ryan  
(Joanne Ryan)

Docket No.: MDSP-P04-180  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Shaughnessy et al.

Application No.: Not Yet Assigned

Confirmation No.:

Filed: February 17, 2004

Art Unit: N/A

For: OSTEOPOROSIS TREATMENT

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

MS Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

Copies of the references on the PTO/SB/08 are not provided because they were previously cited by or submitted to the Office in a prior application number 09/715838, filed November 17, 2000 and relied upon in this application for an earlier filing date under 35 U.S.C. 120.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this

Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. MDSP-P04-180.

Dated: February 17, 2004

Respectfully submitted,

By  \_\_\_\_\_  
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**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**  
(Use several sheets if necessary)
Docket Number (Optional)  
MDSP-P03-180Application Number  
09/715,838Applicant  
Shaughnessy et al.Filing Date  
17-Nov-2000Group Art Unit  
1614**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	4683195	28-Jul-1987	Mullis et al.	435	6	07-Feb-1986
	AB	5215895	01-Jun-1993	Bennett	435	69.52	21-May-1990
	AC	5270181	14-Dec-1993	McCoy	435	69.7	14-Aug-1991
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**FOREIGN PATENT DOCUMENTS**

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						YES	NO
	AE	2177837	07-Jun-1996	CA	A61K	38/20	
	AF	WO96/18648	20-Jun-1996	PCT	C07K	14/54	
	AG	WO96/19574	27-Jun-1996	PCT	C12N	15/12	
	AH	WO98/15283	16-Apr-1998	PCT	A61K	38/17	
	AI	WO99/59608	25-Nov-1999	PCT	A61K	38/00	

**OTHER DOCUMENTS**

(Including Author, Title, Date, Pertinent Pages Etc.)

	AJ	Austin et al., "Site-directed mutagenesis of alanine-382 of human antithrombin III", FEBS Letters 280 (2): 254-258 (1991).
	AK	Davis et al., "LIFR $\beta$ and gp130 as Heterodimerizing Signal Transducers of the Tripartite CNTF Receptor", Science 260: 1805-1808 (1993).
	AL	Ershier et al., "Immunologic Aspects of Osteoporosis", Devel. Compar. Immunol. 21 (6): 487-499 (1997).
	AM	Girasole et al., "Interleukin-11: A New Cytokine Critical for Osteoclast Developments", J. Clin. Invest. 93: 1516-1524 (1994).
	AN	Ishimi et al., "IL-6 is Produced by Osteoblasts and Indices Bone Resorption", J. Immunol. 145 (10): 3297-3303 (1990).
	AO	Karow et al., "Mediation of interleukin-11-dependent biological responses by a soluble form of the interleukin-11 receptor", Biochem J. 318: 489-495 (1996).
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	AQ	Leahy et al., "A Method for Attachment of Peptides to a Solid Surface with Enhanced Immunoreactivity", Biotechniques 13 (5): 738-743 (1992).
	AR	Michalon et al., "Enzyme Coupling Method on Calibrated Nylon Spheres: Application to the Selective Trypsinization of Histones in Chromatin", Biochem. Biophys. Res. Comm. 167 (1): 9-15 (1990).
	AS	Muir et al., "A Histomorphometric Comparison of the Effects of Heparin and Low-Molecular-Weight Heparin on Cancerous Bones in Rats", Blood 89 (9): 3236-3242 (1997).

**INFORMATION DISCLOSURE CITATION**  
**IN AN APPLICATION**  
*(Use several sheets if necessary)*

Docket Number (Optional)  
 MDSP-P03-180

Application Number  
 09/715,838

Applicant  
 Shaughnessy et al.

Filing Date  
 17-Nov-2000

Group Art Unit  
 1614

	AT	Muir et al., "Histomorphometric Analysis of the Effects of Standard Heparin on Trabecular Bone in Vivo", Blood 88 (4): 1314-1320 (1996).
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	AW	Poli et al., "Interleukin-6 deficient mice are protected from bone loss caused by estrogen depletion", EMBO J. 13 (5): 1189-1196 (1994).
	AX	Romas et al., "The Role of gp130-mediated Signals in Osteoclast Development: Regulation of Interleukin 11 Production by Osteoblasts and Distribution of Its Receptor in Bone Marrow Cultures", J. Exp. Med. 183: 2581-2591 (1996).
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	BA	Van Leuven et al., "Molecular Cloning and Characterization of the Human Interleukin-11 Receptor $\alpha$ -Chain Gene, IL11RA, Located on Chromosome 9p13", Genomics 31 (1): 65-70 (1996).
	BB	Vlasselaer et al., "Leukemia Inhibitory Factor (LIF): A Growth Factor with Pleiotropic Effects on Bone Biology", Progress in Growth Factor Research 4: 337-353 (1992).
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	BD	Yin et al., "Involvement of IL-6 Signal Transducer gp130 in IL-11-Mediated Signal Transduction", J. Immunol. 151 (5): 2555-2561 (1993).
EXAMINER		DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

<b>Notice of References Cited</b>	Application/Control No. 09/715,838	Applicant(s)/Patent Under Reexamination SHAUGHNESSY ET AL.	
	Examiner Elizabeth C. Kemmerer, Ph.D.	Art Unit 1646	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
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	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Ngo et al., 1994, The Protein Folding Problem and tertiary Structure Prediction, Merz et al., eds., Birkhauser, Boston, pp. 491-495.
	V	Wells, 1990, Biochemistry 29:8509-8517.
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.